

# Articulating our values to clarify our mission: Inviting community participation

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*"The mission of The Journal of General Physiology (JGP) is to publish articles that elucidate important biological, chemical, or physical mechanisms of broad physiological significance. The major emphasis is on physiological problems at the cellular and molecular level."*

In the 1996 film *Jerry Maguire*, the title character, a sports management agent, wrote a mission statement entitled "The things we think and do not say: the future of our business." Life's most important decisions are often based on unarticulated values. Jerry dared to articulate his values, generating applause from his coworkers but disdain from the establishment (he was fired as a result). Spelling out our values can be risky, but it is only through critical self-reflection that we can change our direction.

As the new Editor of *The Journal of General Physiology*, I look to our mission statement for the values to guide me. "*The mission . . . is to publish articles*" offers little direction. In fact, I don't agree that publishing articles is our only mission. Anyone with access to the internet can publish articles. Doesn't our community deserve more? As it continues, our mission statement does little more to articulate our values. The articles we publish should "*elucidate important biological, chemical, or physical mechanisms of broad physiological significance*," but how do we define "important" and "significance"?

I assert that an emphasis on "important" work that is "significant" no longer serves us, as these terms have been appropriated by for-profit journals and others who seek to devalue basic science research. In a recent editorial, Marc Kirschner, chair of the Department of Systems Biology at Harvard Medical School, takes on the myth of significance: "One may be able to recognize good science as it happens, but significant science can only be viewed in the rearview mirror. To pretend otherwise distorts science" (Kirschner, 2013). Does publishing work of "significance" really capture the *JGP* mission? Could it cause us to miss out on careful, rigorous, thoughtful work whose place in history is not yet clear?

The pressure to publish "important" work in high impact journals with ever-increasing standards of "significance" is suspected to underlie, at least in part, the apparent epidemic of nonreproducible results and outright fraud. Kirschner attributes at least some of the blame for this problem to the behavior of scientific journals: "Reviewers

and editors increasingly insist on major extensions of the submitted work to inflate its (narrowly defined) impact, while at the same time making such extensions a condition for acceptance. In today's competitive job and grant market, these demands create a strong inducement for sloppy science" (Kirschner, 2013). Could our insistence on "*significance*" contribute to the apparent epidemic of corrupt scientific values? Are we doing a disservice to trainees seeking employment and to all of us seeking funding? Does drinking the Kool-Aid of "*significance*" undermine the very basic science to which we devote our careers?

Our hubris in believing we can predict the role of any given study in curing humanity's ills may be squashing the very imagination and creativity required to solve our most pressing problems. In reviewing grant proposals, the National Institutes of Health (NIH) recognizes that high reward science sometimes carries high risk. But work that aims to gain a thorough, deep understanding of a scientific problem may take a hit for not being "innovative." Significance is an explicitly scorable criterion in the proposal review process. When quantifying significance, NIH [instructs reviewers](#) to determine "How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?" Applying definitions of "*significance*" such as that reflected in this question formalizes a bias against discovery-driven research. Not even anecdotal evidence supports investing in translational science over discovery-driven science. Blind acceptance of review criteria that court "innovation" and "significance," defined by what is already known, instead of what we have yet to discover, is inherently unscientific. Kirschner captures this problem well, asserting that we "should reemphasize humility, banishing the words 'impact' and 'significance' and seeing them for what they really are: ways of asserting bias without being forced to defend it" (Kirschner, 2013).

Like Jerry Maguire, brave voices in the scientific community have begun to speak about what is wrong with

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how we run our business and what we can do to fix it. But department chairs and journal editors cannot reform scientific discourse by themselves. We need those like Jerry Maguire's client Rod Tidwell, whose values guided him to remain with Jerry after his mission statement got him fired. As Editor of *JGP*, I may appear to be self-serving by urging you to submit your best work to nonprofit journals run by editors who are themselves active scientists. But I believe that, one paper at a time, we can together model the future of science as we believe it should be. Our authors, reviewers, and readers are *JGP*. You are *JGP*. You determine the quality, rigor, innovation, and inventiveness of the work found within our pages. You determine whether careful and thoughtful carry the day over significant and important.

Over the next year as we update our mission statement, I will ask you, like Jerry Maguire asks Rod Tidwell, to "Help me . . . to help you. Help me help you." What values do you believe our mission statement should reflect? What is the appropriate role of *JGP* in the future of our business? Because YOU are *JGP*, I ask that

you make your voices heard and your views known. Together, we can ensure that *JGP* remains a force for good in science, continuing in the best tradition of those preceding me at the helm. Help *JGP* to help you by contributing as authors, reviewers, and readers, and by telling me what you think. I invite you all to get involved, stay involved, and feel the pride of what *JGP* represents.

In closing, I'd like to thank Ed Pugh for his tireless efforts as Editor of *JGP* over the last five years. Ed, your contributions on behalf of our *JGP* community cannot be overstated. You leave big shoes to fill and will be missed. On behalf of our community, our authors, reviewers, readers, editorial advisory board, associate/managing/executive/production editors, and all those involved with *JGP*, I salute you.

## REFERENCE

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